

FIG. 2 is a very diagrammatic sectional view of the container of FIG. 1.

DETAILED DESCRIPTION OF THE INVENTION

The container represented in the drawing includes an outer shell denoted overall by 1, an inner shell denoted overall by 2, a stopper device denoted overall by 3 and fitted with connections (not represented) for the introduction and distribution of chemical products to and respectively from the cavity formed by the inner shell 2, a dust cap 4 covering the connections projecting upwards from the stopper device 3, during transport and storage, and an annular upper lid denoted overall by 5 mounted at the upper end of the outer shell 1.

The outer shell 1 includes a cylindrical part 6 formed integrally with a rectangular base 7 fitted with feet 8.

The outer shell 1 formed of the cylindrical part 6 and of the base 7 is, preferably, made up of a double-walled structure, particularly made of polyethylene filled with a foam, preferably polyurethane.

Owing to its shape and dimensions, the base 7 constitutes a structure which overhangs slightly with respect to the cylindrical part 6 and constitutes protection against any lateral impacts.

The base also contributes to the very good stability of the container on the ground and may act as a pallet during transport and storage.

The inner shell 2, produced for example from PFA reinforced with composite materials, includes a cylindrical part 9 located concentrically with the cylindrical part 6 of the outer shell 1 with a radial spacing 10, the said cylindrical part 9 extending downwards in the form of a domed part 11 and upwards in the form of a part 12, also domed, ending in a collar 13 defining the opening giving access to the volume inside the inner shell.

As seen in FIG. 2, the inner wall 14 of the collar 13 defining the opening giving access to the inside of the inner shell 2 exhibits a frustoconical shape converging towards the inside of the said shell.

The stopper device 3, in the form of a disc, at its lower part includes a frustoconical bearing surface 15, the shape of which corresponds to the frustoconical bearing surface 14 of the collar 13 allowing mounting and forcible retention of the stopper device 3 on the collar 13.

The stopper device 3 is fitted, in a conventional manner, with connections (not represented) extending downwards and upwards from the device as illustrated.

The stopper device may be produced from a composite material and coated, at least on its part facing the volume inside the inner shell, with a sheet of thermoformed chemically inert material, particularly PFA, it being possible for the upper part of the stopper device also to be coated with a sheet of PFA or of polyethylene.

The annular lid 5 fitted at the upper end of the cylindrical part 6 of the outer shell 1 exhibits, as is best seen in FIG. 1, the shape of a ring cut from a cone frustum, this ring itself being truncated along radii in order to define bosses 16 separated by slits 17 each including a base wall inclined downwards and outwards.

The maximum height of the bosses 16 of the lid is at least equal to the height of the parts of the connections made through the stopper device 3 and extending upwards from the latter.

The stopper device 3 is assembled to the collar 13 by non-metallic fixing members, particularly ones made of composite material, and in the same manner, non-metallic fixing elements are provided for fixing the lid to the inner shell on the one hand and to the outer shell on the other hand.

In practice, the junctions of the lid with the outer shell and the collar of the inner shell are closed by seals of the ring type in order to plug any gap which might remain between the assembled components and thus prevent any retention of chemical product in such gaps.

The present invention thus makes it possible to produce a pressurizable container which is entirely demountable, has no metallic components, is resistant to attack by the chemical products transported and offers excellent resistance to impacts, throughout the phases of transport, storage and distribution.

We claim:

1. A free standing container for transporting, storing, and dispensing chemical products, including an inner shell made of fluorinated plastic, particularly PFA, fitted at its upper part with a stopper device (3) penetrated by filling and dispensing connections, and an outer shell (1) having a generally cylindrical outer shape and an inner shape generally congruent with that of the inner shell, characterized in that the outer shell (1) comprises an upper cylindrical part (6) which is integrally joined at its bottom portions with a base (7), said base having a quadrilateral shape and said base being of greater cross-sectional area than that of the cylindrical part of the outer shell, said base (7) having lateral portions projecting outwardly beyond the upper cylindrical portions of said outer shell and thereby providing protection against impacts from the side as well as stability of the free-standing container, said outer shell cylindrical part and base being integral, one piece, molded construction.

2. Container according to claim 1, characterized by the fact that the said base (7) exhibits a rectangular shape.

3. Container according to claim 1 characterized by the fact that the said base (7) has feet (8) at its lower part.

4. Container according to claim 1 characterized by the fact that the outer shell (1) is surmounted by an annular lid (5), the said lid being made up of a plurality of bosses (16) separated from each other by slits (17) with a bottom wall inclined downwards and outwards.

5. Container according to claim 4, characterized by the fact that the annular lid (5) exhibits a frustoconical overall shape, the bosses (16) being segments of a cone frustum.

6. Container according to claim 1, characterized by the fact that the stopper device (3) is fixed to a collar (13) provided at the upper part of the inner shell (2) and exhibits a frustoconical lower extension (15) capable of being housed in the said collar which for this purpose includes an inner wall (14) of corresponding frustoconical shape.

7. Container according to claim 1, characterized by the fact that the inner shell (2) exhibits a cylindrical part (9) and domed lower and upper parts (12), the said cylindrical part (9) being located radially away from the cylindrical part (6) of the outer shell (1).

8. Container according to claim 1, characterized by the fact that the inner shell (2) is reinforced with composite materials, particularly polyester and glass fibres.

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